

AMENDMENTS TO THE SPECIFICATION

1. Please replace the paragraph starting on line 27 of page 6 with the following
5 amended paragraph:

As the receiving window 73 and the transmitting window 83 advance with each other, PDUs stream from the first station and are assembled into corresponding SDUs by the second station. These SDUs are then passed in order to layer 3. As noted 10 previously, the communications protocol requires that SDUs be delivered to layer 3 fully whether the connection is in the in-sequence delivery mode or in the of out-of-sequence mode. However, the protocol does allow SDUs to be discarded. This may occur, for example, due to a timeout, in which the data in the SDU is no longer relevant. When a layer 2 SDU is discarded at the layer 2 level, i.e., by discarding the 15 layer 2 PDUs that carry the layer 2 SDU, layer 2 must inform layer 3 of the SDUs that were discarded. To discard layer 2 SDUs, the first station sends layer 2 control PDUs to the second station indicating which SDUs are to be discarded. Upon reception of this control PDU, the second station adjusts its receiving window 73 accordingly, and informs its layer 3 of the SDUs that have been discarded. The second station then 20 informs the first station that the discarding procedure has been performed by sending a layer 2 discarding control acknowledgment PDU. Upon receipt of the acknowledgment PDU from the second station, the first station layer 2 interface informs its layer 3 interface of the discarded SDUs. In this manner, the layer 3 interfaces of the first and second stations are both properly informed of discarded 25 SDUs, and the discarded SDUs should be the same for both stations. That is, both the first station layer 3 and the second station layer 3 should agree upon the SDUs that were discarded, thus ensuring that applications and the layer 3 signaling messages in the two stations have proper data-synchronization with each other.

30 2. Please replace the paragraph starting on line 5 of page 15 with the following amended paragraph:

To better understand the above, please refer to Fig.12. Fig.12 is a block diagram of a communications system 110 that utilizes the method of the present invention. The communications system 110 comprises a first station 120 and a second station 130.

The first and second stations 120, 130 may be base stations, mobile stations, handheld transceivers, personal data assistants (PDAs), computing devices, etc. In particular, the first station 120 has an application 124 that wishes to send a message 124a to an application 134 on the second station 130. To send the message 124a, the application 124 negotiates with a layer 3 interface 123. Sometimes, the layer 3 interface 123 may itself generate layer 3 signaling messages 123a. The layer 3 interface 123 submits the message 124a, or the layer 3 signaling message 123a, to the layer 2 interface 122 in the form of a layer 2 service data unit (SDU) 126. Each SDU 126 can have a variable length. The layer 2 interface 122 composes the SDUs 126 into one or more protocol data units (PDUs) 125, each of which has a fixed length. The PDUs 125 are then delivered to the layer 1 interface 121, which performs the physical transmission of data. It should be clear to one skilled in the art that the actual physical layer used for the layer 1 interface 121 may be of any wireless type for the purposes of the present invention. Upon reception of the transmitted data, a layer 1 interface 131 on the second station 130 composes the data into one or more PDUs 135, which are passed to a layer 2 interface 132. The layer 2 interface 132 reassembles the PDUs 135 in layer 2 SDUs 136, which are passed up to a layer 3 interface 133. The layer 3 interface 133 uses the layer 2 SDUs 136 to deliver a message 134a to the application 134, or to process the layer 3 signaling message 133a. The application message 134a, or the layer 3 signaling message 133a, that is received should be identical to the application message 124a or the layer 3 signaling message 123a that was transmitted.

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3. Please replace the paragraph starting on line 28 of page 19 with the following amended paragraph:

Please refer to Fig.16 with reference to Figs.12-15. Fig.16 is another MRW acknowledgment PDU 160b that comprises a type field 161b, an N field 167b, an SN ACK field 166b and an M field 169b according to the present invention. However, the MRW acknowledgment PDU 160b shows an MRW acknowledgment when, on

receiving the MRW request PDU 151, VR(R) 132a for the second station 130 points to a PDU position as indicated by arrow 145b. In this case, SDU_21 has already been passed up to the layer 3 interface 133, and thus cannot be discarded by the second station 130. Instead, in the first embodiment, the second station 130 sends the MRW
5 acknowledgment PDU 160b with an M field 169b set equal to zero (M=0), indicating that no SDU-terminating PDUs were discarded, and transmits the MRW acknowledgment PDU 160b to the first station 120. Since SDU_22 ends in the PDU 143, and as the PDU 143 cannot be discarded because of SDU_24, the first station 120 learns that only the layer 2 SDUs SDU_22 and SDU_23 were discarded, and informs
10 the layer 3 interface 123 accordingly. For this example, if the second embodiment is used, the M field 169b would instead indicate the actual number of layer 2 SDUs discarded, and would hold a value of 2 (M=2). Alternatively, for the third embodiment, the M field 169b holds the number of layer 2 PDUs discarded, and would thus hold a value of two (M=2). As a final note for these in-sequence communication mode values
15 for the M field 169a and 169b, it should be understood that the SN_ACK field 166a and 166b is also used by the first station 120 to determine which layer 2 SDUs were discarded by the second station 130. For example, if VR(R) 132a had pointed to the PDU 144 upon reception of the MRW request PDU 151, then the SN_ACK field 166b would hold a value of 97, rather than the value of 96 shown in Fig.16. The M field
20 169b would still be zero. The first station 120 would thus know that SDU_21, SDU_22 and SDU_23 had already been received by the second station 130 and thus could not be discarded.